UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,489	06/09/2005	Murray Figov	91255MGB	7114

1333 7590 03/20/2008

EASTMAN KODAK COMPANY
PATENT LEGAL STAFF
343 STATE STREET
ROCHESTER, NY 14650-2201

EXAMINER	
ZIMMERMAN, JOSHUA D	

ART UNIT	PAPER NUMBER
2854	

MAIL DATE	DELIVERY MODE
03/20/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/538,489	FIGOV, MURRAY	
	Examiner	Art Unit	
	JOSHUA D. ZIMMERMAN	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 January 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *40-45,49,50,53 and 71* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *40-45,49,50,53 and 71* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/12/07 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 40, 41, 43-45, 49, 50 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Fukino et al. (EP 1 057 622 A2).

Regarding claim 40, Fukino et al. disclose “a lithographic printing blank comprising a coating deposited from aqueous fluid onto a substrate (abstract), the coating comprising:

polyvinyl alcohol (paragraph 246);

polyacrylic acid that is present between 20% and 60% of the dry coating weight (paragraph 165);

hydrophobic water-based emulsion (paragraph 267);

aminoplast (paragraph 247); and

at least one wetting agent (paragraph 267)."

Fukino et al. fail to disclose that the polyvinyl alcohol "is present at between 1% and 15% of the dry coating weight," that the hydrophobic water-based emulsion has a "pH of 7 or below" and "is present at between 25% and 55% of the dry coating weight," or that the aminoplast "is present at not more than 10% of the dry coating weight when the coating is hydrophilic, and between 10% and 20% of the dry coating weight when the coating is oleophilic."

However, specifically regarding the concentrations of each component, Fukino et al. teaches ranges of concentrations for most of the components in the layer (see, e.g., paragraphs 272, 165, 270, etc.), suggesting that varying the concentrations of the various components is not only feasible, but encouraged. Further, since a range is disclosed for most of the components, and since the total concentration of all components must equal 100%, a range of concentrations is inherently disclosed for the remaining components which do not have an explicitly disclosed range.

Specifically regarding the concentration of the polyvinyl alcohol component, Fukino et al. teach that it is added for giving an appropriate strength to the image recording layer (paragraph 246). Therefore, it would have been obvious to one having ordinary skill in the art, through routine experimentation, to select a concentration of polyvinyl alcohol between 1% and 15% in order to optimize the strength of the image recording layer.

Regarding the hydrophobic water-based emulsion concentration, Fukino et al. teach a range of concentrations in paragraph 269, and further teach that the emulsions are added to control the degree of hydrophilicity of the coating (paragraph 266). Therefore, it would have been obvious to one having ordinary skill in the art, through routine experimentation, to choose a concentration of hydrophobic water-based emulsion between 25% and 55% of the dry coating weight in order to optimize the hydrophilicity. Further, one having ordinary skill in the art would have a reasonable expectation of success of controlling and/or achieving a desired degree of hydrophilicity in modifying the range of concentration disclosed by Fukino et al. Finally, by modifying the concentration of the emulsion, one having ordinary skill in the art would achieve the expected result of controlling the hydrophilicity of the coating, as taught by Fukino et al. in paragraph 266.

Regarding the amount of the aminoplast, Fukino et al. teach that aminoplasts are added as water-proofing agents for crosslinking and curing (paragraph 247). Therefore, it would have been obvious to one having ordinary skill in the art, through routine experimentation, to set the concentration at not more than 10% (or between 10% and 20% as alternatively claimed) in order to optimize the amount of crosslinking present.

Finally, regarding the limitation that the hydrophobic water-based emulsion have a pH of 7 or below, even though Fukino et al. do not specifically mention the pH of the emulsions described in paragraphs 267 and 268, since there appears to be no difference between the emulsions disclosed and those claimed by Applicant, and

Applicant has not shown evidence to the contrary in previous responses, it is asserted that at least one of the emulsions disclosed by Fukino et al. has a pH of 7 or below.

Regarding claim 41, Fukino et al. further disclose “wherein the coating is hydrophilic (abstract).”

Regarding claim 43, Fukino et al. further disclose “wherein the aminoplast is a urea-formaldehyde resin (paragraph 247).”

Regarding claim 44, Fukino et al. further disclose “wherein the hydrophobic water-based emulsion has one of a phenol formaldehyde (paragraph 266) and an acrylic polymer or copolymer as its internal phase (paragraph 268).”

Regarding claim 45, Fukino et al. further disclose “wherein the coating has a dry coating weight between 1 gram per square meter and 4 grams per square meter (paragraph 284).”

Regarding claim 49, Fukino et al. further disclose "wherein the wetting agent comprises silicone surfactant (paragraph 319).

Regarding claim 50, Fukino et al. further disclose “wherein the at least one wetting agent is present at between 0.5% and 7% of the dry coating weight (paragraph 277).”

Regarding claim 53, Fukino et al. further disclose “wherein the substrate comprises one of untreated aluminum (paragraph 288), aluminum treated with phosphoric acid (paragraph 299), and anodized aluminum (paragraph 292).”

Regarding claim 71, Fukino et al. teach all that is claimed, but fail to specifically exclude “a crosslinking catalyst for the aminoplast.” However, the catalysts listed by

Fukino et al. (paragraph 248) are not necessarily used for crosslinking an aminoplast. Furthermore, the catalysts listed are listed as being optional (paragraph 247, 248), and therefore the case where catalysts are absent is possible. Regardless, one having ordinary skill in the art would recognize that catalysts for aminoplasts are not necessary to crosslink the aminoplasts, and would have been motivated to exclude them in order to lower the cost of the printing plate.

3. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fukino et al. as applied to claim 40 above, in view of Hallman et al. (US 5,820,932).

Regarding claim 42, Fukino et al. teach all that is claimed, but fail to teach that "the coating is oleophilic." However, Hallman et al. teach the desire and ability to reverse the hydrophilicity of the printing plate coating (column 4, lines 45-54). It would have been obvious to one of ordinary skill in the art at the time of the invention to change the hydrophilicity of the coating in order to meet the needs of the print job, such as when water-based ink is desired to be printed.

Response to Arguments

Applicant's arguments filed 06/12/07 have been fully considered but they are not persuasive.

4. Applicant argues that Fukino et al. do not teach using both polyvinyl alcohol and polyacrylic acid in combination in paragraph 246. However, the rejection also cited paragraph 165, which teaches using either of these compounds as well. So, one having

ordinary skill in the art could choose to use polyvinyl alcohol as a hydrophilic high molecular compound, as disclosed in paragraph 246, and then use polyacrylic acid as an oxidizable compound, as disclosed in paragraph 165. Therefore, both compounds would be included, and would be used in combination.

5. Applicant's argument that there are 'hundreds of possible combinations of the materials' is not persuasive since Fukino et al. clearly disclose using polyvinyl alcohol and polyacrylic acid.

6. Absent any showing by Applicant that the range claimed by Applicant shows unexpected results, Applicant's argument against the motivation provided for altering the range of concentration of the emulsion of Fukino et al. is not persuasive. It is the position of the Examiner that one having ordinary skill in the art would reasonably expect to be able to control the hydrophilicity by modifying the range of Fukino et al., as stated in the above rejection.

7. Applicant's argument that Fukino et al. do not teach that catalysts are absent is unpersuasive. Applicant admits in the paragraph bridging pages 9 and 10 that one having ordinary skill in the art would know that the catalysts for aminoplasts would to necessarily be needed, and would therefore be optional. Therefore, the motivation provided above to leave them out (that is, to lower costs) is deemed sufficient motivation to leave them out. See MPEP 2144.04 II.

8. Applicant's argument that Hallman et al. do not teach a permanent layer is also moot, since applicant does not claim such a limitation. Said argument is further moot

because Hallman et al. is relied upon merely for teaching reversing the hydrophilicity of the printing plate coating in order to meet the needs of the print job.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSHUA D. ZIMMERMAN whose telephone number is (571)272-2749. The examiner can normally be reached on M-R 8:30A - 6:00P, Alternate Fridays 8:30A-5:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Judy Nguyen/
Supervisory Patent Examiner, Art Unit 2854

Joshua D Zimmerman
Examiner
Art Unit 2854

jdz